

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 35-77 are pending in the application, with claims 35, 52 and 54 being the independent claims. Claims 54, 76 and 77 have been allowed. Claims 35 and 52 have been amended to recite multiple repeat-containing sequences and multiple restriction enzyme cleavage sites. Claim 42 has been amended to be dependent on Claim 35 and to include the complements of SEQ ID NOS: 1-4. Claim 47 has been amended to delete the second occurrence of “*DraI*”. Support for the amendment to claims 35 and 52 may be found, for example, in the original claims (e.g., claims 1, 2, 7-9), Example 1 and Figure 1 of the specification. No new matter is added by way of these amendments, and their entry is respectfully requested.

Based on the above amendments and the following remarks, Applicants respectfully request that the Examiner reconsider and withdraw the outstanding rejections.

**I.      *Claim Rejections Under 35 U.S.C. § 112, First Paragraph***

Claims 35-41, 43-53 and 55-75 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. (Office Action, page 2.) Applicants disagree.

The claims as amended recite nucleic acids that comprise multiple repeat-containing sequences and multiple restriction sites, where the top strand of the repeat-containing sequence has substantially the same percentage of each respective nucleotide as the bottom strand, and where the restriction sites are formed by the junction of adjacent repeat-containing sequences. The statute does not require Applicants to list specific nucleic acid molecules that fall within the scope of the claims. What is conventional or well known to those of skill in the art need not be disclosed in detail. Persons of ordinary skill in the art would recognize that Applicants were in possession of such nucleic acids bases on the teaching in the Specification. For example, the Specification teaches:

“to prepare the repeat-containing nucleic acid molecules of the invention, one may first prepare an oligonucleotide that contains multiple copies of a repeat. The oligonucleotides may be prepared by methods of solid phase syntheses or other methods suitable for synthesis of oligonucleotide molecules that will be apparent to one of ordinary skill in the art.” (see page 9, lines 3-7)

The Specification further teaches:

“The repeat-containing sequences of the invention may be ligated to produce multiple repeats. Since such repeats are separated by restriction sites according to the invention, one or more of these repeats may subsequently be separated by cleavage with a restriction enzyme such as a blunt-end or sticky-end restriction endonuclease.” (see page 10, lines 25-29)

Numerous restriction sites are provided in the Specification at pages 11-13, and Example 1 provides a detailed description of how to make and use a nucleic acid in accord with the invention.

An applicant is not required to disclose working examples of every species of a claimed genus to meet the written description requirement. In particular, what is conventional or well known to those of ordinary skill in the art need not be disclosed in

detail. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384 (Fed. Cir. 1986). In addition, the Federal Circuit has specifically instructed that a specification that teaches one of skill in the art to make and use an invention can be sufficient to show a person of ordinary skill in the art that the inventor possessed the invention. *See Moba, B.V. v. Diamond Automation, Inc.*, 325F. 3d 1306, 1321 (Fed. Cir. 2003) (“the specification that teaches one of skill in the art to make and use an invention also convinced that artisan that the inventor possessed the invention.”).

Repeat-containing nucleic acids and restriction sites are well known and easily identified. Skilled artisans using conventional procedures in molecular biology can readily construct nucleic acids that comprise multiple repeat-containing sequences and multiple restriction sites, where the top strand of the repeat-containing sequence has substantially the same percentage of each respective nucleotide as the bottom strand, and where the restriction sites are formed by the junction of adjacent repeat-containing sequences. Skilled artisans reading Applicants’ “make and use” teachings provided in the Specification would have understood that Applicants were in possession of the claimed nucleic acids when the application was filed.

Applicants therefore request that the rejection under 35 U.S.C. § 112, first paragraph, be reconsidered and withdrawn.

## ***II. Claim Rejections Under 35 U.S.C. § 112, Second Paragraph***

Claim 42 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants

regard as the invention. (Office Action, page 4.) Specifically, the phrase “complements thereof” was characterized as indefinite. Claim 42 as amended no longer recites this language. Applicants therefore request that the rejection under 35 U.S.C. § 112, second paragraph, be reconsidered and withdrawn.

**III. *Claim Rejection Under 35 U.S.C. § 102(b)***

Claims 35, 36, 38-43, 46, 47, 50-53, 55, 63, 64, 73 and 74 were rejected under 35 U.S.C. § 102(b) as being anticipated by Okazaki et al. (*Neurobiol. Aging* 16:883-894, 1995). Claims 35 and 52 as amended recite nucleic acids comprising multiple repeat-containing sequences and multiple restriction sites, where the restriction sites are formed by the junction of adjacent repeat-containing sequences. Okazaki et al. describe two adjacent repeat containing sequences separated by a single restriction site. In order for claims to be anticipated by a reference, every element of the claim must be found within the reference. Okazaki et al does not disclose nucleic acid molecule comprises multiple restriction sites, and Applicants respectfully request that the rejection under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

***Conclusion***

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. Applicants believe that a full and

complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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